

REMARKS

Regarding the Status of the Claims:

Claims 1-3, 5, 6, 7, 12, 18, 22, 27, 29, 30, 35, 42, 43, 48, 49, 56, 68, 74, 80, 86, 90, 91, 105, 109, 111, 121, 130, 132, 139, 145, 153, 156, 178, 179, 181, 186, and 193 are currently pending for reconsideration. Of these, claims 1, 80, 86, 90, 105, 145, 153, 186, and 193 are in independent form.

Claims 1, 5, 6, 12, 22, 35, 90, 91, 105, 111, 145, 153, and 193 are currently amended. The amendments to claims 1, 90, 105, and 145 are intended to better highlight novel features of the invention, while the amendments to claims 12, 22, 91, and 111 are intended to address the Examiner's objection and rejection under 35 U.S.C. 112 as discussed below. The amendment to claim 5 is to conform to the amendments to claim 1, and the amendment to claim 6 is to correct dependency. The amendments to claim 22 and to claims 153 and 193 are made to slightly improve the form thereof.

Claims 4, 13, 81, 83, and 155 are canceled hereby. Claims 8-11, 14-17, 19-21, 23-26, 28, 31-34, 36-41, 44-47, 50-55, 57-67, 69-73, 75-79, 82, 84, 85, 87-89, 92-104, 106-108, 110, 112-120, 122-129, 131, 133-138, 140-144, 146-152, 154, 157-177, 180, 182-185, and 187-192 were previously canceled.

Regarding the Objections to the Claims:

As to claims 22 and 111, applicants respectfully submit that the claims were entirely proper in their original form. Nevertheless, these claims have been amended to make even more clear that the device is comprised of a gel which contains the indicated amount of water. As to claims 27 and 109, the term "active entity" is defined in the specification at page 24, lines 11-18. Since claims 27 and 109 recite that the gel which is a component of the device itself, and not something put into the device comprises the active entity, it is respectfully submitted that these claims are entirely proper, and that the objection should be withdrawn.

Regarding the Rejection under 35 U.S.C. 112:

Claims 12 and 13 have been combined, and claim 91 has been amended to address this rejection by reciting a specific range.

As to claims 43 and 48, the Examiner is respectfully referred to the description in the specification at page 11, lines 14-26 and page 30, lines 5-15. It is respectfully

submitted that this clearly defines the meaning of both "interwell area" and "knife edged". Since the claims use the same terminology, it is respectfully submitte that these claims are not indefinite. If the Examiner persists in this rejection, he is respecfully requested to suggest alternative wording.

Regarding the Rejections under 35 U.S.C. 102:

Claims 1-2, 5, 42, 80, 86, 145, 153, and 156 stand rejected as anticipated by Bochner U.S. patent 5,627,045 (Bochner). The Examiner's position is that the cited portions of the reference (Col. 8, line 35-Col. 9, line 9), and Figs. 1-4 disclose the embodiments of the invention recited in these claims. This rejection is respectfully traversed.

Independent claim 1 as amended, recites that "the insides of said wells inhibit adhesion of living cells thereto". Similarly, method claim 145 as amended recites "forming the inside of said wells to inlude a surface that inhibits adhesion thereto of living cells held in said wells".

Independent claim 80 is directed to "A gel carrier, the carrier having a plurality of wells disposed on a surface each well configured to hold at least one living cell", and claim 86 is directed to " A carrier comprising a plurality of wells disposed on a surface each well configured to hold at least one living cell, the carrier characterized in that bottoms of said wells are flat".

Claim 153 is directed to a method of manipulating cells. As amended, this claim recites:

- (a) providing a well-bearing component as described in claim 1 including a plurality of wells, wherein each well is configured to hold at least one living cell . . .

It is respectfully submitted that Bochner does not anticipate any of these claims. Bochner is directed to a method of identifying microorganisms using standard well-bearing configurations with gel-forming matrices of various compositions. Neither in the portions of the patent the cited by the Examiner, nor elsewhere, is there any disclosure, teaching, or suggestion that the wells are configured or formed to inhibit adhesion as in claims 1 and 145, or that the carrier itself is formed of a gel as in claim 80, or that the well bottoms are flat as in claim 86. Likewise, since Bochner fails to disclose, teach, or suggest the device of claim 1, it can also not anticipate claim 153.

Claims 2, 5, and 42 are dependent on claim 1, and claim 156 is dependent on claim 153. These claims are not anticipated by Bochner for the same reasons as their parent claims and further because they recite features, which, when considered in combination with their parent claims, are also not anticipated by Bochner.

Claims 1-3, 5- 7, 35, 42-43, 49, 68, 74, 121, 130, 132, 139, 145, 185, and 193 stand rejected as anticipated by Kim et al. U.S. patent publication 2003/0030184 (Kim). The Examiner's position is that the cited paragraphs (135, 138, 142-143, 190-199, 206, 208, and 215) and Figs. 1a, 1b, and 2a, disclose the embodiments of the invention recited in these claims. This rejection is respectfully traversed.

Preliminarily, it is noted that claim 185 (which was previously canceled) is mentioned in the general statement of this rejection in the second full paragraph on page 4 of the Office Action, but are not mentioned subsequently. Further, claims 86 and 186 are not mentioned in the general statement of the rejection, but claim 86 is discussed in the third paragraph on page 4 and on page 6. The discussion on page 6, however, appears to be referring to the recitations of claim 83. Also, claim 186 is discussed in detail in the first paragraph on page 7. It is therefore assumed that the Examiner intended to include claims 83, 86, and 186 in the rejection under Kim, but not claim 185. The rejection of claim 83 is moot as this claim has currently been canceled.

In any event, as in the case of the rejection based on Bochner, Kim fails to disclose, teach, or suggest that the wells are configured or formed to inhibit adhesion as in claims 1 and 145, or that the well bottoms are flat as in claim 86. Likewise, since Kim fails to disclose, teach, or suggest the device of claim 1, it can also not anticipate claim 121.

Claims 2, 5, 6, 7, 35, 42, 49, 68, and 74 are dependent on claim 1, and claims 130, 132, and 139 are dependent on claim 121. These claims are not anticipated by Kim for the same reasons as their parent claims and further because they recite features, which, when considered in combination with their parent claims, are also not disclosed, taught or suggested by Kim.

Claim 186 recites, among its other features, "c) increasing the size of said well so as to provide an increased space for proliferation of said cell." There is no mention of this in paragraph [208] of Kim cited by the Examiner. Claim 186 is accordingly not anticipated by Kim.

Finally, claim 193 is directed to A method of collecting cells from a biological sample. This claim as amended recites:

(a) providing a well-bearing device, said well-bearing device having:

(i) a plurality of wells disposed on a surface, each well configured to hold at least one cell; and (ii) a plurality of protuberances protruding from said surface; and

(b) contacting the biological sample with said surface so as to remove cells from the biological sample.

This claim is also not anticipated by Kim. There is no disclosure, teaching, or suggestion in paragraphs 135 and 208 of a surface having protuberances, or of removing cells from a biological sample by contacting the sample with said surface.

Regarding the Rejections under 35 U.S.C. 103:

Claims 12 and 90 are rejected as "being anticipated by" Kim in light of Sanghera et al. U.S. patent 5525800 (Sanghera) and Hahn et al. U.S. patent publication 2003/0017079 (Hahn). While these claims have been rejected as "anticipated", it is understood as being under 35 U.S.C. 103 because multiple references have been applied. As so understood, applicants traverse the rejection of claim 12 because it is dependent on claim 1, and is therefore patentable over Kim for the reasons stated above. Neither Sanghera nor Hahn disclose, teach, or suggest that "the insides of said wells are structured to inhibit adhesion of living cells thereto", and therefore can not satisfy the deficiency in Kim.

Claim 90 has been amended in the same manner as claim 1 to recite that "the insides of said wells inhibit adhesion of living cells thereto". This claim is therefore also not rendered unpatentable over Kim in view of Sanghera and Hahn, as stated above.

Claim 91 has also been rejected as unpatentable over Kim in view of Sanghera and Hahn. However, this claim is dependent on claim 90, and is also allowable over Kim in view of Sanghera and Hahn for the reasons stated above.

Claims 18, 22, 27, 29-30, 105, 109, and 111 stand rejected as unpatentable over Kim in view of Ravkin U.S. patent publication 2003/0030184 (Ravkin). This rejection is respectfully traversed.

Claims 18, 22, 27, 29-30 are all dependent on claim 1. Kim fails to disclose, teach, or suggest that "the insides of said wells inhibit adhesion of living cells thereto" as discussed above in connection with claim 1, and are patentable over Kim alone for that reason.

The Examiner has cited Ravkin for its teaching of what he interprets as a gel cover. Ravkin does nothing to rectify the failure of Kim to disclose, teach, or suggest the missing feature of claim 1. These claims are therefore not obvious over Kim in view of Ravkin.

Claims 109 and 111 are dependent on claim 105. Claim 105 has been amended like claim 1 to recite that "the insides of said wells inhibit adhesion of living cells thereto". This claim is therefore also not obvious over Kim in view of Ravkin. Claims 109 and 111 are not obvious over Kim in view of Ravkin for the same reason as their parent claim.

Claims 178, 179, and 181 stand rejected as unpatentable over Bochner in view of Kim. This rejection is also traversed. Claim 153, on which these claims depend, is not anticipated by Bochner because Bochner fails to disclose, teach, or suggest the features of claim 1 as amended, which are incorporated in claim 153, as discussed above. Kim likewise fails to disclose, teach, or suggest these features, also as discussed above. Thus, irrespective of what else is found in Kim, it fails to rectify the basic deficiency in Bochner relative to claim 1. Claims 178, 179, and 181 are accordingly not rendered unpatentable over Bochner in view of Kim.

In view of the foregoing amendments and arguments, it is respectfully submitted that the application is in condition for allowance, and early notice thereof is respectfully solicited.

Respectfully submitted,

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Date: June 7, 2010